

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (currently amended): A process of dewatering aqueous suspension employing a flocculating system comprising

i.) treating the suspension with a flocculating amount of a first flocculant and a dewatering amount of a second flocculant,

ii.) thickening the treated suspension of step i.) by release of free water,

iii.) mixing the thickened suspension, wherein the second flocculant particulates are distributed throughout the thickened suspension of step ii.),

and

iv.) subjecting the suspension to mechanical dewatering to form a cake, wherein the first flocculant brings about flocculation and assists thickening of the suspension and the second flocculant further deters the suspension,

characterised in that the second flocculant is a water-soluble or water swellable polymer that is mixed into the suspension in the form of a water-soluble or water swellable particulate polymer having a particle diameter of at least 20 microns, wherein the first and second flocculants are not counterionic.

2. (original): A process according to claim 1 in which the aqueous suspension is sewage sludge.

3. (previously presented): A process according to claim 1 in which the mechanical dewatering employs an apparatus selected from the group consisting of belt press, filter press, screw press and centrifuge.

4. (previously presented): A process according to claim 1 in which the second flocculant is a particulate polymer having a particle diameter of at least 50 microns.

5. (previously presented): A process according to claim 1 in which the second flocculant is a cationic polymer.
6. (previously presented): A process according to claim 1 in which the second flocculant is formed from at least 50% by weight cationic monomer or monomers.
7. (previously presented): A process according to claim 1 in which the second flocculant is selected from the group consisting of cationic polyacrylamides, polymers of dialkyl dallyl ammonium chloride, dialkyl amino alkyl (meth) -acrylates (or salts thereof) and dialkyl amino alkyl (meth)-acrylamides (or salts thereof).
8. (previously presented): A process according to claim 1 in which the second flocculant has an intrinsic viscosity of at least 0.5 dl/g.
9. (previously presented): A process according to claim 1 in which the second flocculant is selected from the group consisting of,
 - i) a polymer formed from 80 to 100% by weight methyl chloride quaternary ammonium salt of dimethyl amino ethyl (meth) acrylate and 0 to 20% by weight acrylamide of intrinsic viscosity between 4 and 10 dl/g,
 - ii) polyvinyl amidine and polyvinyl amines of intrinsic viscosity greater than 1 dl/g,
 - iii) quaternised salts of Mannich addition polyacrylamides of intrinsic viscosity greater than 1 dl/g, and
 - iv) poly dimethyl dallyl ammonium chloride of intrinsic viscosity greater than 0.5 dl/g.
10. (previously presented): A process according to claim 1 in which the first flocculant is a cationic organic polymer.
11. (previously presented): A process according to claim 10 in which the cationic organic polymer is selected from the group consisting of acrylamide polymers, polyvinyl amidine, polyvinyl amine, poly dimethyl dallyl ammonium chloride, poly amines, polyethyleneimines, mannich polyacrylamides and quaternised mannich polyacrylamides.

12. (previously presented): A process according to claim 1 in which the first flocculant and second flocculant are added substantially simultaneously.
13. (previously presented): A process according to claim 1 in which the first flocculant and second flocculant are combined into a single composition.
14. (previously presented): A process according to claim 13 in which the single composition is a particulate polymer product in which the first flocculant comprises particles having a diameter below 10 microns and the second flocculant comprises particles having a diameter above 20 microns.
15. (previously presented): A process according to claim 1 in which the second flocculant comprises polymeric particles having a coating applied to the surface.
16. (original): A process according to claim 15 in which the coating is a silicone.
17. (original): A process according to claim 15 in which the coating is a water-soluble wax.
18. (previously presented): A process according to claim 1 in which the second flocculant is introduced into the suspension in form of a slurry in a liquid.
19. (original): A process according to claim 18 in which the liquid is polyethylene glycol.
20. (new): A process according to claim 1, wherein the first and second flocculants are both cationic.
21. (new): A process according to claim 20, wherein the second flocculant is a polymer formed from at least 30% by weight cationic monomer.
22. (new): A process according to claim 21, wherein the second flocculant is a polymer formed from at least 50% by weight cationic monomer and 0 to 50% by weight acrylamide.
23. (new): A process according to claim 21, wherein the second flocculant is a polymer of intrinsic viscosity between 4 and 10 dl/g.
24. (new): A process according to claim 21, wherein the cationic monomer is methylchloride quaternary ammonium salt of dimethyl amino ethyl (meth) acrylate.

25. (new): A process according to claim 22, wherein the first flocculant is a cationic acrylamide.

26. (new): A process according to claim 22, wherein the second flocculant is a particulate polymer having a particle diameter between 100 and 800 microns.

27. (new): A process according to claim 1, wherein thickened suspension in step ii.) is a memi solid sludge paste.